## Amendments to the claims:

Please amend the claims as shown below:

1. (Currently Amended) A composition comprising a substantially purified AviIII peptide, said AviIII peptide comprising a catalytic domain of a glycosyl hydrolase family 74 (GH74\_Ace) enzyme having at least 70% identity to SEQ ID NO. 3 1 and a carbohydrate binding domain (CBD) III, the catalytic domain GH74\_Ace having a sequence identical to SEQ ID NO. 3 in each conserved position marked by an asterisk (\*), as shown below in comparison to Aspergillus aculeatus Avicelase III (AviIII\_Aace):

GH74_Ace AviIII_Aac	ATTOPYTWSNVAIGGGG-FVDGIVFNEGAPGILYVRTDIGGMYRWDAANGRWIPLLDWVG AASQAYTWKNVVTGGGGGFTPGIVFNPSAKGVAYARTDIGGAYRLNSDD-TWTPLMDWVG
GH74_Ace AviIII_Aac	WNNWGYNGVVSIAADPINTNKVWAAVGMYTNSWDPNDGAILRSSDGGATWQITPLPFKLG NDTWHDWGIDALATDFVDTDRVYVAVGMYTNEWDPNVGSILRSTDQGDTWTETKLPFKVG :.* *::::::::::::::::::::::::::::::::::
GH74_Ace AviIII_Aac	Gnmpgrgmgerlavdpnndnilyfgapsgkglwrstdsgatwsgmtnffdvgtyianptd Onmpgrgmgerlavdpnknsilyfgarsghglwkstdygatwsnvtsftwtgtyfodsss
GH74_Ace AviIII_Aac	TTGYQSDIQGVVWVAFDKSSSSLGQA\$KTIFVGVADPNNPVFW\$RDGGATWQAVPGAP-T TYTSDPVGIAWVTFDST8G85GSATPRIFVGVADAGKSVFKSEDAGATWAMVSGEPQY * * ** *: *: *: *: *: *: ** ** * * * *
GH74_Ace AviIII_Aac	GFIPHKGVPDPVNHVLYIATSNTGGPYDGSSGDVWKPSVTSGTWTRISPVPSTDTANDYF GFLPHKGVLSPEEXTLYISYANGAGPYDGTNGTVHKYNITSGVWTDISPTSLASTYY
GH74_Ace AviIII_Aac	GYSGLTIDRQHPNTIMVATQISWWPDTIIFRSTDGGATWTRIWDWTSYPNRSLRYVLDIS GYGGLSVDLQVPGTLMVAALNCWWPDBLIFRSTDSGATWSPIWEWNGYPSINYYYSYDIS
GH74_Ace AviIII_Aac	AEPWLTFGVQPNPPVP8PKLGWMDEAMAIDPFN9DRMLYGTGATLYATNDLTKWDSGGQI NAPWIQDTTSTDQPPVRVGWMVEALAIDPFDSNHWLYGTGLTVYGGHDLTNWDSKHNV
GH74_Ace AviIII_Aac	HIAPMVKGLEETAVNDLISPPSGAPLISALGDLGGFTHADVTAVPSTIFTSPVFTTGTSV TVKSLAVGIEEMAVLGLITPPGGFALLSAVGDDGGFYHSDLDAAPNQAYHTPTYGTTNGI : .: *:** ** .**:** .**; ** .** *** *:* *.* ; : * ;
GH?4_Ace AviIII_Aac	DYAELMPSIIVRAGSFDPSSQPNDRHVAFSTDGGKNWFQGSEPGGVTTGGTVAASADGSR DYAGNKPSNIVRSGASDDYPTLALSSNFGSTWYADYAASTSTGTGAVALSADGDT *** :** ***: * ; *: *
GH74_Ace AviIII_Aac	<pre>FVWAPGDPGQPVVYAVGFGNSWAASQGVPANAQIRSDRVNPKTFYALSNGTFYRSTDGGV VLLMSSTSGALVSKSQGTLTAVSSLPSGAVIASDKSDNTVFYGGSAGAIYVSKNTAT .: * * : * : : * * * : * * : * *</pre>
GH74_Ace AviIII_Aac	TFQPVARGLPSSGAVGVMFHAVPGKEGDLWLAASSGLYHSTNGGSSWSAI-TGVSSAVNV SPTKTVS-LGSSTTVNAIR-AHPBIAGDVWASTDKGLWHSTDYGSTFTQIGSGVTAGWSF :*
GH74_Ace	GFGKSAPGSSYPAVFVVGTIGGVTGAYRSDDCGTTWVLINDDQHQYGN-WGQAITGDHAN

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- 2. (Previously Amended) The composition of claim 1 wherein the AviIII peptide is further defined as comprising a linker and a signal sequence.
  - 3. (Previously Cancelled)
- 4. (Previously Amended) The composition of claim 1 or 2 wherein the carbohydrate binding domain (CBD) III of the AviIII peptide is further defined as comprising a length of about 80 to about 150 amino acids.
- 5. (Previously Amended) The composition of claim 1 or 2 wherein the carbohydrate binding domain (CBD) III of the AviIII peptide is further defined as comprising a length of about 90 amino acids.
- 6. (Previously Amended) The composition of claim 1 wherein the glycosyl hydrolase family 74 enzyme catalytic domain is further defined as including a polypeptide sequence identical to SEQ ID NO: 3.
- 7. (Currently Amended) The composition of claim 1 wherein the carbohydrate binding domain (CBD) III is further defined as comprising the a polypeptide sequence of SEQ ID NO: 4.
- 8. (Previously Amended) The composition of claim 1 wherein the carbohydrate-binding domain (CBD) III is further defined as comprising the polypeptide sequence of SEQ ID NO: 5.
- 9. (Previously Amended) The composition of claim 1 wherein said AviIII protein comprises sequences identical to the polypeptides of SEQ ID NO: 3 and SEQ ID NO: 4.

- 10. (Currently Amended) The composition of claim 1, wherein the catalytic domain of GH74 Ace including has at least 90% sequence identity with SEQ ID NO: 3.
- 11. (Currently Amended) The composition of claim 1, wherein the catalytic domain of GH74 including has at least 80% sequence identity to with SEQ ID NO: 3.
- 12. (Previously Amended) An isolated AviIII peptide having a polypeptide sequence of SEQ ID NO: 1.
  - 13. (Cancelled)
- 14. (Previously Amended) An industrial mixture suitable for degrading cellulose, such mixture comprising the AviIII polypeptide of claim 1.
- 15. (Original) The industrial mixture of claim 14 further defined as comprising a detergent..

16-27 (Cancelled)

- 28. (Previously Amended) An isolated polypeptide molecule comprising at least one polypeptide sequence selected from the group consisting of:
  - a) a polypeptide sequence of SEQ ID NO: 3;
  - b) a polypeptide sequence of SEQ ID NO: 4;
  - c) a polypeptide sequence of SEQ ID NO: 5;
  - d) a polypeptide sequence of SEQ ID NO: 1; and
  - e) combinations thereof.
  - 29. (Previously Cancelled)
- 30. (Original) A fusion protein comprising the polypeptide of claim 28 and a heterologous peptide.

- 31. (Original) The fusion protein of claim 30, wherein the heterologous peptide is a substrate targeting moiety.
- 32. (Original) The fusion protein of claim 30, wherein the heterologous peptide is a peptide tag.
- 33. (Previously Amended) The fusion protein of claim 32, wherein the peptide tag is 6-His, thioredoxin, hemaglutinin, glutathione S-transferase, or OmpA signal sequence tag.
- 34. (Original) The fusion protein of claim 30, wherein the heterologous peptide is an agent that promotes polypeptide oligomerization.
- 35. (Original) The fusion protein of claim 34, wherein the agent is a leucine zipper.
- 36. (Original) A cellulase-substrate complex comprising the isolated polypeptide molecule of claim 28 bound to cellulose.
  - 37-42 (Cancelled)
- 43. (Original) A composition comprising the polypeptide molecule of claim 28 and a carrier.
  - 44-46. (Cancelled)